



DIOMEDEA EXULANS, *Linn.*

Wandering Albatros.

- Diomedea exulans*, Linn. Syst. Nat., vol. i. p. 214.—Lath. Ind. Orn., vol. ii. p. 789.—Steph. Cont. of Shaw's Gen. Zool., vol. xiii. p. 259. pl. 30.—Vieill. Gal. des Ois., pl. 295.—Ib. Ency. Méth. Orn., Part III. p. 27.
Plautus albatrus, Klein, Aves, p. 148. no. 13.
Albatrus, Briss. Orn., tom. vi. p. 126.—Buff. Pl. Enl., 237.—Ib. Hist. Nat. des Ois., tom. ix. p. 339.—Cuv. Règne Anim., tom. i. p. 517.
Man-of-War Bird, Albin, vol. iii. p. 34. pl. 81. head.
Wandering Albatros, Edw. Glean., pl. 88.—Penn. Arct. Zool., vol. ii. p. 423.—Lath. Gen. Syn., vol. v. p. 304.—Ib. Gen. Hist., vol. x. p. 48.
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It is a very prevalent idea that a lengthened voyage at sea must be attended with much monotony and *ennui*; such however is not the case, as from experience I can testify that the mind may be so far occupied in observing the hundreds of novelties which are constantly presenting themselves to its notice, that a voyage, however extensive, is neither tedious nor uninteresting, and I shall always look back with feelings of pleasure to that in the course of which I made the circuit of the globe. It was then that I first had an opportunity of observing in a state of nature the noble bird I am now about to attempt a slight history of. The *Diomedea exulans* is by far the largest and most powerful species of its tribe, and from its great strength and ferocious disposition, is held in terror by every other bird with which it is surrounded. It is even said that it will fearlessly attack and tear out the eyes of a drowning man, a feat, from what I have observed of it, I can readily imagine it would attempt. It is most abundant between the 30th and 60th degrees of south latitude, and appears to be equally numerous in all parts of the ocean bounded by those degrees, and I feel assured that it is confined to no one part, but is constantly engaged in making a circuit of the globe in that particular zone allotted by nature for its habitation. The open sea is in fact its natural home, and this it never leaves except for the purpose of breeding, when it usually resorts to rocky islands the most difficult of access. To mention particular times and places where I observed this bird would be superfluous, as it was almost daily seen while sailing within the prescribed latitudes; it will not, however, be out of place to mention, that I first hailed its presence during my passage to Australia on the 24th of July 1838, in lat. 30° 38' south, long. 20° 43' west, and from that day until my arrival at Van Diemen's Land it was constantly around the ship, but was more abundant off the Cape of Good Hope and the island of St. Paul's than elsewhere.

The powers of flight of the Wandering Albatros are much greater than those of any other bird that has come under my observation. Although during calm or moderate weather it sometimes rests on the surface of the water, it is almost constantly on the wing, and is equally at ease while passing over the glassy surface during the stillest calm, or sweeping with arrow-like swiftness before the most furious gale; and the way in which it just tops the raging billows and sweeps between the gulfy waves has a hundred times called forth my wonder and admiration. Although a vessel running before the wind frequently sails more than 200 miles in the twenty-four hours, and that for days together, still the Albatros has not the slightest difficulty in keeping up with the ship, but also performs circles of many miles in extent, returning again to hunt up the wake of the vessel for any substances thrown overboard.

"It is pleasing," says Mr. Bennett in his 'Wanderings,' "to observe this superb bird sailing in the air in graceful and elegant movements, seemingly excited by some invisible power, for there is scarcely any movement of the wings seen after the first and frequent impulses are given, when the creature elevates itself in the air; rising and falling as if some concealed power guided its various motions, without any muscular exertion of its own, and then descending sweeps the air close to the stern of the ship with an independence of manner as if it were 'monarch of all it survey'd.' It is from the very little muscular exertion used by these birds that they are capable of sustaining such long flights without repose. When seizing an object floating on the water they gradually descend with expanded or upraised wings, or sometimes alight and float like a duck on the water, while devouring their food; then, elevating themselves, they skim the surface with expanded wings, giving frequent impulses as they run along for some distance, until they again soar in mid-air and recommence their erratic flights. It is interesting to view them during boisterous weather, flying with, and even against, the wind, seeming 'the gayest of the gay' in the midst of howling winds and foaming waves. I remarked that the Albatros would lower himself even to the water's edge, and elevate himself again without any apparent impulse; nor could I observe any percussion of the wings when the flight was directed against the wind, but then, of course, its progress was tardy. Many, however, have differed with me in considering that the birds never fly 'dead against the wind,' but in that manner which sailors term 'close to the wind,' and thus make progress, aided by, when seemingly flying against, the wind. This bird is evidently aided by its long wings as well as tail in directing its flight; it is never seen to soar to any great height, and is often observed to change its course by turning the wings and body in a lateral direction, and oftentimes when raising itself to bend the last joint of the wings downwards."

Like the other species of the genus, it is nocturnal as well as diurnal, and no bird with which I am acquainted takes so little repose: it appears to be perpetually on the wing, scanning the surface of the ocean for mollusks and medusæ, and the other marine animals that constitute its food. So frequently does the boldness of this species cost it its life, that hundreds are annually killed without, however, its num-

bers being apparently in any degree lessened; it readily seizes a hook baited with fat of any kind, and if a boat be lowered its attention is immediately attracted, and while flying round it is easily shot. Many exaggerated and marvellous accounts having been published respecting the weight and the dimensions of this bird, particularly of the extent from tip to tip of the wings, I paid much attention to the subject, and after killing numerous examples of both sexes and of all ages, I found the average weight of the *Diomedea exulans* to be seventeen pounds, and the extent from tip to tip of the wing ten feet one inch. Dr. McCormick, R.N., however, informs me that he has met with examples weighing as much as twenty pounds, the extent of whose outstretched wings measured twelve feet. The known breeding-places of the *Diomedea exulans* are the islands of Tristan d'Acunha, Auckland and Campbell; that it also breeds on the Mewstone, Eddystone, and the adjacent rocks to the southward of Van Diemen's Land, I have but little doubt, as some of the finest adult specimens I procured were shot within a few miles of those barren and inaccessible rocks; but as I have not had an opportunity of observing the nidification of this bird, I avail myself of Mr. Augustus Earle's "Narrative of a nine months' residence on the island of Tristan d'Acunha," wherein he says,—

"Yesterday, May the 28th, being a fine morning, accompanied by two of the men, I determined to ascend the mountain. As several parties had before gone up, they had formed a kind of path; at least we endeavoured to trace the same way, but it required a great deal of nerve to attempt it: the sides of the mountain are nearly perpendicular; but after ascending about 200 feet, it is there entirely covered with wood, which renders the footing much more safe; but in order to get to the wood, the road is so dangerous that it made me almost tremble to think of it; slippery grey rocks and many of them unfortunately loose, so that when we took hold they separated from the mass, and fell with a horrid rumbling noise; here and there were a few patches of grass, the only thing we could depend upon to assist us in climbing, which must be done with extreme caution, for the least slip or false step would dash one to atoms on the rocks below. By constantly looking upwards and continuing to haul ourselves up, by catching firm hold of the grass, after an hour's painful toil we gained the summit, where we found ourselves on an extended plain of several miles' expanse, which terminates in the peak, composed of dark grey lava, bare and frightful to behold. We proceeded towards it, the plain gradually rising, but the walk was most fatiguing over strong rank grass and fern several feet high. A deathlike stillness prevailed in these high regions, and, to my ear, our voices had a strange unnatural echo, and I fancied our forms appeared gigantic, whilst the air was piercing cold. The prospect was altogether sublime and filled the mind with awe: the huge Albatros here appeared to dread no interloper or enemy, for their young were on the ground completely uncovered, and the old ones were stalking around them. They lay but one egg, on the ground, where they make a kind of nest by scraping the earth around it; the young is entirely white and covered with a woolly down, which is very beautiful. As we approached they snapped their beaks with a very quick motion, making a great noise; this and the throwing up of the contents of the stomach are the only means of offence and defence they seem to possess. I again visited the mountain about five months afterwards, when I found the young Albatroses still sitting on their nests, and they had never moved away from them."

To this interesting account I beg to append the following notes, kindly furnished me by Dr. McCormick, Surgeon of H.M.S. Erebus during the late expedition to the South pole:—

"The *Diomedea exulans* breeds in Auckland and Campbell Islands, in the months of November and December. The grass-covered declivities of the hills, above the thickets of wood, are the spots selected by the Albatros for constructing its nest; which consists of a mound of earth, intermingled with withered grass and leaves matted together, 18 inches in height, 6 feet in circumference at the base, and 27 inches in diameter at the top, in which only *one* egg is usually deposited; for after an examination of more than a hundred nests, I met with *two* eggs in the *same* nest in one solitary instance only. The eggs I had an opportunity of weighing varied in weight from 14½ to 19 oz., thirty specimens giving an average weight of 17 oz.; colour white. The Albatros during the period of incubation is frequently found asleep, with its head under its wing: its beautiful white head and neck, appearing above the grass, betray its situation at a considerable distance off. On the approach of an intruder it resolutely defends its egg, refusing to quit the nest until forced off, when it slowly waddles away in an awkward manner to a short distance, without attempting to take wing. Its greatest enemy is a fierce species of *Lestris*, always on the watch for the Albatros quitting its nest, when this rapacious pirate instantly pounces down and devours the egg. So well is the poor bird aware of the propensity of its foe, that it snaps the mandibles of its beak violently together whenever it observes the *Lestris* flying overhead."

I am indebted to Dr. McCormick for a fine egg of this species, which is four inches and three-quarters long by three and a quarter broad, of a pure white and of the ordinary shape; another, presented by this gentleman to the Royal College of Surgeons, is much longer and nearly equal in size at both ends.

Mr. Earle states that the young are a year old before they can fly, but on this point I fear he must be mistaken; for although a long period must elapse before their lengthened wings are sufficiently developed to sustain their heavy bodies during their lengthened flights, still it is natural to suppose that the young would leave the nest before the recurrence of the breeding-season; and we know that such is the case, from the circumstance of young birds and newly laid eggs not having been found at the same time on the islands visited by the officers of the late expedition under Captain Ross.

The Wandering Albatros varies much in colour at different ages: very old birds are entirely white, with the exception of the pinions, which are black; and they are to be met with in every stage, from pure white, white freckled and barred with dark brown, to dark chocolate-brown approaching to black, the latter colouring being always accompanied by a white face, which in some specimens is washed with buff; beneath the true feathers they are abundantly supplied with a fine white down; the bill is delicate pinky white inclining to yellow at the tip; irides very dark brown; eyelash bare, fleshy and of a pale green; legs, feet and webs pinky white.

The young are at first clothed in a pure white down, which gives place to the dark brown colouring mentioned above.

The figures represent a bird of the middle age, and a bird supposed to be two years of age, about half the natural size.